

## Iowa

Science and Engineering Profile							
Characteristic	State	U.S.	Rank	Characteristic	State	U.S.	Rank
Doctoral scientists, 1999 <sup>1</sup> .....	4,480	518,670	31	Total R&D performance, 1998 (millions).....	\$1,054	\$214,668	34
Doctoral engineers, 1999 <sup>1</sup> .....	560	107,100	35	Industry R&D, 1998 (millions).....	\$634	\$163,480	34
S&E doctorates awarded, 1999 <sup>1</sup> .....	372	25,953	22	Academic R&D, 1998 (millions).....	\$358	\$25,342	24
of which, in life sciences.....	31%	25%		of which, in life sciences.....	63%	57%	
in engineering.....	22%	21%		in engineering.....	17%	16%	
in physical sciences.....	18%	14%		in physical sciences.....	7%	9%	
S&E postdoctorates, 1998 <sup>1</sup>				Public higher education current-fund			
in doctorate-granting institutions.....	459	39,494	23	expenditures, 1997 (millions).....	\$2,233	\$125,236	19
S&E graduate students, 1998 <sup>1</sup>				Number of SBIR awards, 1990-98.....	51	35,413	42
in doctorate-granting institutions.....	4,952	422,834	27	Patents issued to state residents, 1999.....	745	83,901	26
Population, 1999 (thousands).....	2,869	276,580	31	Gross state product, 1998 (billions).....	\$85	\$8,800	29
Civilian labor force, 1999 (thousands).....	1,574	140,536	30	of which, agriculture.....	5%	1%	
Personal income per capita, 1999.....	\$25,615	\$28,542	34	manufacturing, mining, construction.....	28%	22%	
Federal spending				transportation, communication, utilities.....	8%	9%	
Total expenditures, 1999 (millions).....	\$15,602	\$1,508,933	31	wholesale and retail trade.....	16%	16%	
R&D obligations, 1998 (millions).....	\$236	\$70,445	34	finance, insurance, real estate.....	15%	19%	
				services.....	16%	21%	
				government.....	11%	12%	

NOTE: Rankings and totals are based on data for the 50 States, District of Columbia, and Puerto Rico. Reliability of the estimates of industry R&D and of doctoral scientists and engineers varies by State, because the sample allocation was not based on geography. The rankings do not take into account the margin of error of estimates from sample surveys.

<sup>1</sup>Data on graduate students, doctoral scientists and engineers, and postdoctorates include all graduate degree (except M.D.) candidates and recipients in S&E fields, including health fields. Data on S&E doctorates awarded do not include health fields.

### Federal Obligations for Research and Development by Agency and Performer: Fiscal Year 1998

Agency	Performer							
	Total	Federal Intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank, total
	[In thousands of dollars]							
Total, all agencies.....	236,084	32,701	20,824	24,757	150,856	4,093	2,853	34
Department of Agriculture.....	39,549	27,187	0	0	12,360	2	0	10
Department of Commerce.....	807	0	0	357	450	0	0	42
Department of Defense.....	28,202	343	1,205	20,765	5,889	0	0	37
Department of Energy.....	26,793	0	19,619	0	4,999	2,175	0	23
Dept. of Health & Human Services.....	105,402	11	0	1,951	101,249	1,901	290	26
Department of the Interior.....	5,362	5,160	0	3	120	0	79	38
Department of Transportation.....	3,051	0	0	0	567	0	2,484	27
Environmental Protection Agency.....	2,369	0	0	0	2,369	0	0	29
National Aeronautics and Space Admin.....	10,666	0	0	1,681	8,985	0	0	33
National Science Foundation.....	13,883	0	0	0	13,868	15	0	32
State rank, total.....	34	40	16	38	27	35	31	na

NOTE: Federal R&D obligations are as reported by funding agencies. Ranks and totals are based on data for the 50 States, District of Columbia, and Puerto Rico.

KEY: FFRDC = federally funded research and development center; SBIR = small business innovation research; na = not applicable.

SOURCES: Prepared by the National Science Foundation/Division of Science Resources Studies. Data compiled from numerous sources -- see the section, "Data Sources for Science and Engineering (S&E) State Profiles".